Fact Sheets

Ford Building Seepage Basin

Background

The Ford Building Seepage Basin is located at the extreme southeastern tip of the Central Shops area near the center of the Savannah River Site (SRS).

The basin was constructed in 1964 to receive wastewater resulting from process equipment repair work in the Ford Building. Much of the work conducted in the Ford Building involved repairing decontaminated heat exchangers from SRS reactors. The repair work generated wastewater contaminated with low levels of radioactivity and trace quantities of non-radioactive organic and inorganic compounds. Repair workers sent the wastewater to a 6,000-gallon underground retention tank adjacent to the Ford Building, where the wastewater was analyzed for radionuclides. Depending on the results, the wastewater was either released to the Ford Building Seepage Basin through an underground sewer pipeline or transferred to Waste Management Operations (WMO) for proper disposal.

In 1984, SRS environmental engineers retired the Ford Building Seepage Basin because the purchase of new heat exchanger heads reduced the need for repairs. Since then, SRS has transported wastewater from Ford Building operations to WMO for disposal.

Environmental Concerns

Groundwater sampling near the Ford Building Seepage Basin began in 1983. Investigations detected levels of lead, mercury, and nitrates within the drinking water standards. No radionuclides were detected in area wells.

In 1985, SRS conducted preliminary soil analyses in and around the basin. These analyses showed that cobalt-60, cesium-137, cadmium, strontium-90, europium-155, mercury, and zinc were present in the basin soils. In 1996 and 1997, SRS performed accelerated characterization and focused characterization studies, respectively. A time-critical removal action was recommended to minimize further soil contamination.

Environmental Actions and Plans

In 1996 and 1997, SRS conducted characterization studies to determine the nature and extent of contamination at the Ford Building Seepage Basin. In November 1997, SRS initiated a removal action to eliminate the influent and effluent process pipe. SRS also began and completed retention tank removal activities in 1998.

In 1999, SRS submitted a Resource Conservation and Recovery Act Facility Investigation/Remedial Investigation and Baseline Risk Assessment (RFI/RI/BRA)

to the U.S. Environmental Protection Agency and the South Carolina Department of Health and Environmental Control. The RFI/RI/BRA was approved in 2000. The Statement of Basis/Proposed Plan (SB/PP) was submitted to the agencies in December 2000 and was approved in March 2001. A final Record of Decision (ROD) was issued in August 2001. The remedial action placed contaminated soils resulting from the 1997 removal action in the basin with contaminated soil in the bottom of the basin. The basin was then filled with native soil and is now maintained under SRS institutional controls. The remedial action was completed in April 2003.